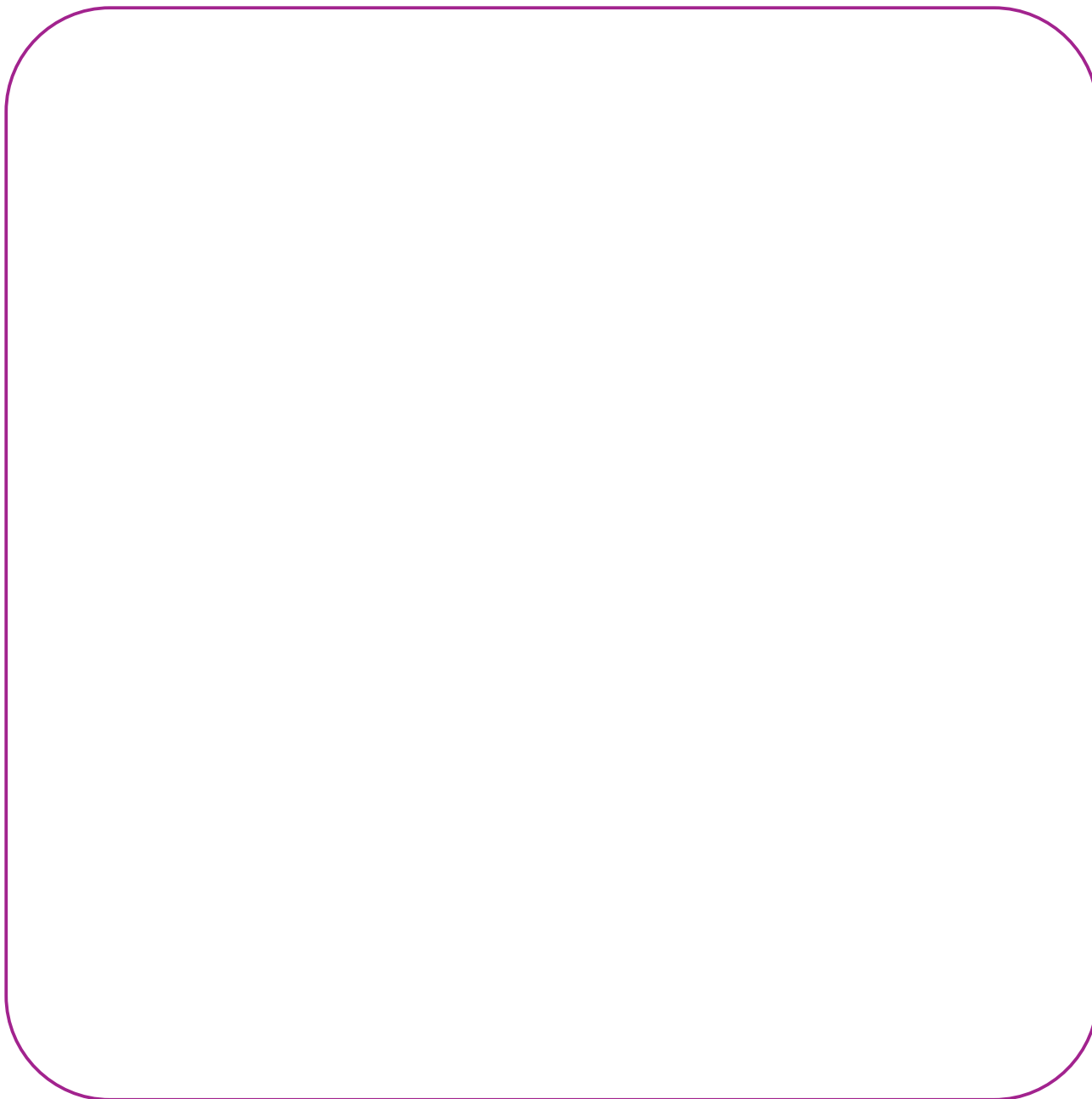


RISH *Lay*

The Protector Trip Relay Series

Data Sheet

Phase Sequence &
Phase Failure Relay



Measure



Control



Record


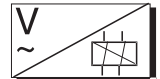


Analyze



Optimize

Model available

	
Function / System	Product Type
3 Phase 3 or 4 wire	252-PVR

Applications

- Portable pumps
- Portable compressors
- Motor driven mixing equipment
- Motors - Single Phasing
- Gensets - correct engine rotation
- All portable equipment
- All rotating machines

An illuminated LED indicates when the relay is energised.

This relay can be used to protect:-

- Portable electrical equipment
- Incorrect sequence connection
- Loss of one phase

Typical uses are:-

- Portable pumps
- Portable Compressors
- Motor driven mixing equipment

Features

- LED trip indication.
- 2 pole relay contacts
- Auto Reset

Introduction

The Rishabh Protector is designed to monitor the correct phase rotation or sequence of 3 phase system L1, L2, L3. Rotating machines are particularly vulnerable to incorrect phase sequence. Three Phase motors can rotate in the wrong direction, potentially leading to physical damage or the risk of injury to personnel, yet voltage & current reading may appear normal. If one phase is lost because of a blown fuse, electric motors can continue to operate (single phasing) which can result in severe electrical or mechanical damage.

For permanent installation, this relay should be used to monitor the incoming supply, protecting all equipment against incorrect connection at initial installation or after maintenance work.

Rotating machines that cannot tolerate reverse rotation or pose significant risk to personnel under this condition should be individually protected with this relay. The possibility of incorrect supply connection is much more likely in portable equipment or marine applications.

Specifications

Nominal Voltage : 100, 110, 120, 220, 230, 240, 380, 400, 415 & 440V (57 to 480V)

System Frequency : 50, 60, or 400Hz (specify)

Burden : 3VA approx.

Overload : 1.2x rated voltage continuously
1.5 x rating for 10 seconds, acc. to BS 6253

Symmetric Under Voltage

Protection : Preset at 85% of nominal

Output Relay

Type : DP Changeover

Rating A.C : 240V, 5A non-inductive
D.C : 24V 5A resistive

Operations : 0.2 million at the above loads

Reset : Automatic

Other Specifications

Operating temperature : 0° C to +60° C

Storage temperature : -20° C to +70° C

Temp. co-efficient : 0.05% per °C

Interference immunity : Electrical stress surge withstand and non function to ANSI/IEEE C37 90a

Enclosure style : DIN-rail with wall mounting facility

Material : Flame retardant polycarbonate /ABS

Enclosure integrity : IP 50

Model 252 dimensions : 55mm(2.2")wide x 70mm(2.8")H x 112mm (4.4") deep

Weight : Approximately 0.4kg

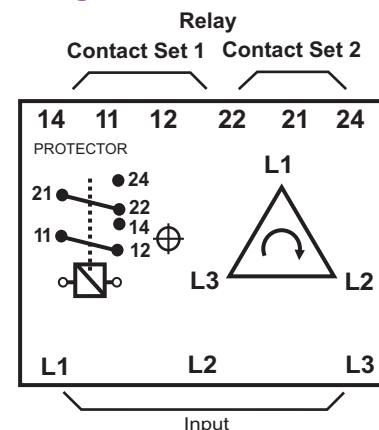
Product Function

The protector continuously monitors the three phase supply. With the correct phase sequence applied, the front panel LED will illuminate & the output relay will be energised. An incorrect sequence or missing phase will de-energise the relay, & the LED will be extinguished. If the supply drops below 85% of its nominal voltage, this condition will also cause a trip.

Important Note

If one phase is lost due to a blown fuse, some loads can re - generate the missing voltage. This relay can be used as a phase failure relay providing the re - generated voltage in the open phase is less than 70% of the nominal supply voltage. If there is the possibility of a higher re - generated voltage, the phase balance relay 252-PSF should be used.

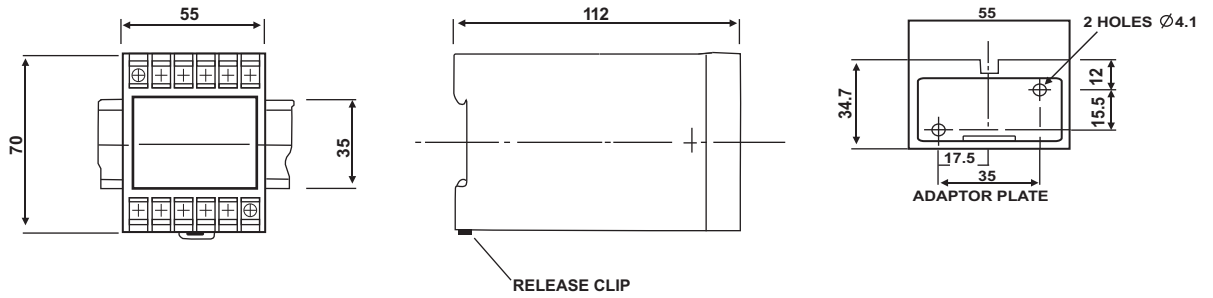
Connection diagrams



Note: Neutral connection is not required
252-PVR

Dimensions

Model 252



Ordering Informations

Please quote :

1. Product Type.
2. Please specify standard or non standard trip. An energised relay is indicated by a "Lit" red LED. Setpoint can be factory adjusted to your requirements.
3. System Voltage and/or Current where applicable.
4. System Frequency.



Measure



Control



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